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## The Moderating Influence of Quality Counselling on the Relationship between Stress Coping Strategies Adopted by Students' Athletes and Student Athletes' Track Performance in Secondary Schools in Nakuru County, Kenya

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### **Abstract:**

*The main objective of this study was to analyze the moderating influence of quality of counseling on the relationship between stress coping strategies adopted by students' athletes and student athletes' track performance in Secondary Schools in Nakuru County, Kenya. The study adopted an ex-post facto research design targeting 3,584 form two and three students in secondary schools in Nakuru County, Kenya. A sample of 351 students was drawn using purposive and stratified random sampling. Data was collected through structured self-administered questionnaires. Hypothesis was tested using regression analysis of .05 level of significance. Data was analyzed by the use of Statistical Package for Social Sciences (SPSS) computer package Version 22.0. The findings of this study may enable coaches to come up with appropriate mechanisms that may help athletes manage their stress effectively. Similarly, it may help secondary schools in Kenya institute appropriate interventions to help athletes cope with the stress associated with their sporting careers. The study will also help in building on existing literature related to sources of stress, coping strategies and school-based interventions among students' athlete in secondary schools. The study will also suggest areas of further research that will create ground for researchers interested in the topic, thus contributing to the expansion of knowledge in the field of counseling psychology. The study established that stress coping strategies adopted by students' athletes negatively influences track performance among athletes in secondary schools in Nakuru County, Kenya. The study established that the introduction of quality of counseling as did not have a moderating influence on the relationship between coping strategies adopted by students' athletes and student athletes' track performance in Secondary Schools in Nakuru County, Kenya. The study recommends that the Ministry of Education in Conjunction with Department of Sports of the Ministry of Social Services should develop Secondary School Sports Policy with Sports Stress Management Guidelines to help manage the emerging sports related stress in Secondary Schools in Kenya. Copies of the policy should be availed in all Secondary Schools in Kenya for use by both Games Masters and Teacher Counsellors ion the Schools.*

**Keywords:** Athletics related stress, stress management, institutional stressors, and athletics track performance

### **1. Introduction**

Sources of stress in sports have been identified and several of them appear to be common in most sports, suggesting that there could be a core group of stressors experienced by all athletes. These common stressors are; pressure to perform at a high standard, concerns about training, institution and competition environment, individual's personality, coaches' behaviors and coaching styles, and difficulties balancing sport and non-sport commitments (Lombardo, Tan, Jensen and Anderson, 2005).

In Kenya, Sports are important in educational institutions as it supports academic performance. However, it has been viewed in two different perspectives in schools as far as their contribution to school connectedness is concerned. One perceives sports as having positive effect on student academic performance while others view it as a hindrance to academic success and a waste of students' precious time. Therefore, this duality in the perception of the contribution of sports should be corrected through research findings. Besides, it is important to note that sports can assume other functions other than the traditional function of entertainment and leisure. These functions include; supporting academic objectives, boosting students' self-concept, self-efficacy, affective needs, behavioural needs, social needs, discipline,

retention rates among others (Ongonga *et al.*, 2010). Sports are now part of academic curriculum in schools under co-curriculum activities by Kenya Institute of Curriculum Development (KICD, 2000).

Based on a transactional conceptualization, stress is defined as an ongoing process that involves individuals transacting with their environments, making appraisals of the situations they find themselves in, and endeavoring to cope with any issues that may arise (Fletcher, Hanton, & Mellalieu, 2006). Student athletes encounter greater academic challenges, and like members of other minority groups, face prejudice and discrimination (Aries, 2004).

There are two types of stress namely eustress and distress. Eustress is the positive stress that individuals need to achieve their goals. Eustress can help individuals achieve peak performance and manage minor crisis. According to Edworthy (2000), distress on the other hand is the negative and can cause low performance and impacts negatively on the physical and mental health. Distress can affect an individual physically, emotionally, mentally and behaviourally. Stress could be both beneficial and detrimental. Beneficial stress, or good stress, is that level of stress that motivates, gets you going, or makes you creative. Detrimental stress makes an individual irritable, dampens spirit, and shortens life. During stressful conditions the body reacts in a special manner to prepare itself for the action that is threatening. There is an increase in breathing, level of adrenaline, production of coagulants in the blood, heart rate and consequent blood pressure, among other physiological and chemical body reactions. This is in preparation for a fight or flight situation which in primitive environments prepare the human body to react (Edworthy, 2000).

Due to the complex dynamic of being a student-athlete, management of stress in this population has become a very important issue. As an athlete exerts energy when exercising in hot environments, his or her core temperature will rise greater than if the individual was exercising at a moderate temperature. This effect may be a possible explanation for decreased athletic performance when environmental temperatures continue to rise, due primarily to excessive fluid loss and impaired thermoregulation in extreme environments (Siegel & Laursen, 2012). In warm environments, exercising induces a rise in core temperature, sweating rate, and progressive dehydration (Özgünen *et al.*, 2010). The ability of an athlete to thermo regulate adequately depends on his or her body type. Athletes with a smaller body size will produce and store less heat than their heavier counterparts (Marino *et al.*, 2000).

Exercise is also additional source of stress (Wilson & Pritchard, 2005). Stress that affects athletes can be of various types. First, it can be time-limited for example waiting to participate in an event that could make or break one's career. Secondly, it could be in the form of sequences which are 'a series of events that occur over an extended period of time as a result of an initiating event. Athletes could be affected over extended times by protracted conflict. Thirdly, stress can be chronic which means that it is intermittent; it can occur once a day, a week, a month and so on. Chronic stress may persist over a long time such as in the case of injury or disability for an athlete (Gilbert & Morawski, 2007). The appraisal process is critically important to the perception of stress and it occurs at two levels. At the first level, it is an evaluative process where a person decides on whether he/she is in trouble or in a problem of some kind (Nucci & Young-Shin, 2005).

Kenya is known for its athletic prowess; however, its performance is getting threatened and athletes seem to be resorting to unconventional ways of dealing with their stress related problems. Since athletic talent is mainly identified and discovered in secondary school students, this study set out to examine and provide information on student track athletes' stress level and how it influences performance. Athletes in public secondary school's experience stress like other elite athletes. The stress is contributed by different factors which if not addressed may affect their track performance. It is not clear whether coping strategies by students' athletes influences students' athletes on track performance of public secondary school student athletes, especially in Nakuru County. It is also not clear whether quality of counseling influences the relationship between coping strategies by students' athletes and students' athletes on track performance. This is the research gap that this study was to fill.

### 1.1. Statement of the Problem

Kenya is known for its athletic prowess; however, its performance is getting threatened and athletes seem to be resorting to unconventional ways of dealing with their stress related problems. Since athletic talent is mainly identified and discovered in secondary school students, this study set out to examine and provide information on student track athletes' stress level and how it influences performance. Athletes in public secondary school's experience stress like other elite athletes. The stress is contributed by different factors which if not addressed may affect their track performance. It is not clear whether stress coping strategies by student athletes' influences on students athletes' track performance of public secondary school student athletes especially in Nakuru County. It is also not clear whether quality of counseling influences the relationship between stress coping strategies by student athletes and student athletes' on track performance. This is the research gap that this study was to fill.

## 2. Literature Review

### 2.1. Coping strategies and Students Athletics Performance

Other studies have looked at coping styles and gender differences, coping differences in sport, and gender differences in stress (Bamuhair *et al.* 2015; Christiansen & Smith, 2016; Delahajj, 2011; Hoar, Evans, & Link, 2012; Holmberg & Sheridan, 2013; Lu *et al.* 2012; Markser, 2017; Rumbold, Fletcher, & Daniels, 2012; Secades *et al.* 2016; Verma *et al.* 2011). However, all of these fail to compare stress levels and coping styles of college athletes and their non-athletic counterparts. This study set out to do just that: compare the perceived levels of stress and coping styles of college students and college athletes.

Research has found that athletes are becoming more conscious about their performances; resulting in an upsurge of athletes administering special techniques aimed at lowering arousal levels and stress through mental skills training

(MST) These techniques are known as coping strategies (Howden, 2007). Previous studies have shown that poor coping strategies and variations in personality types may contribute to additional stress in certain individuals, leading to a negative pattern of behavior, development of psychosomatic symptoms, and decreased academic performance (Busari, 2011).

Gregg (2005) found that psychologists should employ an alternative outcome measure where they would break down an event into composite skills so that the athlete can mentally rehearse each stage of a technique they struggle with. Athletes may be able to imagine themselves performing a technique but may not be able to imagine the crowd applauding such an effort (Gregg, 2005). A study by Hamilton, (2007) supports the notion that both types of self-talk aid the athlete regardless of how they are delivered and that "the nature, content and delivery of self-talk may not be as important as individual interpretation of that self-talk." (pp.237). It is important that care and consideration is present when the psychologist implements negative self-talk (Hamilton, 2007).

Progressive muscle relaxation techniques are used to help lower cognitive and state anxiety levels in athletes (Navaneethan, 2010). Research has concluded that this training method can be implemented to decrease competitive anxiety; thus, increasing athletic performance (Shaw, 2005). Navaneethan suggests practitioners should target a muscle group that is primarily linked to a specific sport. For example: the arms in golf, the legs in cycling.

Dealing with stress means that the athlete has to instantly deal with hormonal or chemical changes in their bodies that they have no control over (Harvard Health Publication 2011). While stress causes the emotions of anger and frustration, the most successful athletes appear calm and collected. The concept is very simple; the one who wins is the one who gets the job done despite the circumstances. It is often the case that two athletes are very similar in talent and skill level in practice, but there is a huge gap in their level during competition. One prime example is tennis. Many of the top professional players hire hitting partners to do drills with them. Of course, these hitting partners have to have a certain level of competency. To people on the sidelines, it may look as if both players are about equal on the practice court. However, the difference can be as great as being ranked number one versus being ranked two hundred.

Peluso, Ross, Gfeller, and Lavoie (2005) agree that imagery along with self-talk will increase positive athletic performance. To further understand the benefits of self-talk and imagery, Peluso et al. studied what is the optimal time frame between self-talk and a golf-putting activity in collegiate students. Golf is viewed to be a more mentally demanding sport, while, for example, football is viewed as a more physically demanding sport. Thus, the mental aspect of golf is tremendously important to the outcome of the athletic performance and, as such, must be understood as much as the physical demands of the sport. On this scale, swimming and track and field also tend to be viewed as a more mentally demanding sports for the athletes are required to focus on technique rather than pure physical strength. In the study conducted by Peluso et al. (2005), the students were divided into nine conditions groups. While the researchers found self-talk and imagery significantly increased putting ability, a difference was found in which technique was preferred based on the amount of physical activity the student was adapted to. It was found that "participants who endorsed limited athletic familiarity and activity (e.g., ten hours or less) preferred self-talk practice whereas participants who endorsed higher ratings scores of athletic familiarity and activity (e.g., ten hours or more) preferred imagery strategies".

## 2.2. Knowledge Gap

The researcher carried out review of various literatures related to; concept of stress among athletes, athletes' performance in relation to institutional stress and athletes' performance. The critically review showed that there is still need of research to be done on athletes stress especially in secondary schools creating a research gap that the current study will by analyzing perception of institutional stressors and the moderating influence of quality of counseling influencing track performance of student athletes in secondary schools in Nakuru County, Kenya.

## 2.3. Theoretical Review

The theoretical aspect of this study is informed by Cognitive Activation Theory of stress (CATS) by Lazarus & Folkman (1984). This theoretical perspective defines stress as a relationship between individuals and their environments. First, stress and coping are viewed as manifestations of dynamic and evaluative interplays between individuals and their environments. Secondly, the cognitive theory of stress and coping suggests that stress and coping are bidirectional processes in that individuals are both agents and objects of environmental change. The theory relies on an assumption that individuals engage in a cognitive appraisal of the environmental condition leading to an evaluation of perceived threats. The cognitive processes include coping mechanisms, an attempt to moderate the environment or an internal attempt to regulate the emotional distress caused by the stressor.

The theory further suggests that repeated experiences with a stimulus allow individuals to adapt and regulate themselves (Ursin & Eriksen, 2004). According to the theory experience may produce discomfort for the individual, arousal and stress is vital to the operation of complex brains. The purpose of arousal is to compel the individual to remove the source of the stress "alarm" and the alarm itself, similar to how it has been argued that the function of effect is to direct action (Frijda, 1996). Or, if not removed, the individual then is able to sustain the activation necessary to handle the stressor. Consequently, the stress experience is part of an adaptive and beneficial system that has survived the test of evolution. CATS theory argues that because the stress alarm occurs when there is a discrepancy between what is desired and what is reality, individuals will associate a probability with the likelihood of abolishing the alarm and its source (Ursin, 2005). This expectancy has a strong influence on the level of arousal. At its simplest, if the person has control and expects a desired outcome, then the alarm may not be activated (i.e., stressors may not be felt, psychologically or physiologically). However, if the future is unpredictable and/or an individual does not have the necessary resources to handle the demands, then the alarm is activated. Further, there are instances when individuals do not possess the necessary resources to handle

the situation and dissociating themselves from it thus engaging a passive response that provokes a positive outcome expectation, reducing stress activation.

To account for individual differences in the activation of the stress response, Lazarus (1966) identified six key decisional components within appraisal and the development of stress, three primary components and three secondary components. Primary appraisal of an event involves addressing what is happening and whether the event is worthy of one's attention (Lazarus, 1993). The individual determines whether the potential stressor is a threat based on previous experiences, knowledge about oneself, and knowledge about the event. Primary appraisal includes three components that are related to the motivational aspects of the encounter with the event. Specifically, primary appraisal includes addressing goal relevance, goal congruence, and the type of ego involvement. Goal relevance indicates whether there is anything at stake to be interfered with by the perceived threat or barrier. If there is nothing to be lost by the presentation of the threat, then no stress response will occur. If the situation is viewed as relevant to the individual's achievement goals, a stress response will result.

The study will also be informed by Rational-Emotive-Behaviour-Theory (REBT) is one of the cognitive behavioural approaches which was founded in 1955 by an American clinical psychologist, Albert Ellis (Scott, 1995). He was the first to pinpoint that people suffer from stress and other conflicts because they believe things which are false. Ellis maintained that emotional and behavioural disturbance was primarily caused by rigid and absolutistic beliefs in the form of musts, shoulds, have to's, got to's (Melgosa, 2000) - demands we make on ourselves, others, the world. In other words, it is individuals who largely upset themselves rather than events, circumstances or other people. In order to minimize emotional disturbance and produce more goal orientated behaviour, rigid or irrational beliefs are pinpointed, challenged and changed to a rational belief system, according to Ellis, 1972.

The stress management strategies would mainly be devoted to cathartic techniques, relaxation, exercise, healthy eating, positive thinking and 'cooling off periods. These are the suggested strategies towards managing stress in my literature review section. From the REBT perspective, these are essentially short term and palliative methods; unless demandingness is disputed and changed to rational ideas through teaching individuals the ABC model, it is unlikely that stress levels will fall.

When examining the experience of chronic stress for athletes, individual differences become apparent. Stress values mostly fall on the moderate side, yet athletes are significantly more stressed on average than people from the general population; whereas athletes with alarmingly high indicators of stress are mainly elite student athletes (shortly EA) who pursue a school or university career in addition to their elite-level sport (Richartz & Sallen, 2017). Chronic stress seems to play an important role in the dropout of athletic careers (Baron-Thiene & Alfermann, 2015). Exhaustion, depression, and burnout are some of the symptoms often mentioned in connection with chronic stress (Gustafsson, Madigan, & Lundkvist, 2017).

### 3. Conceptual Framework

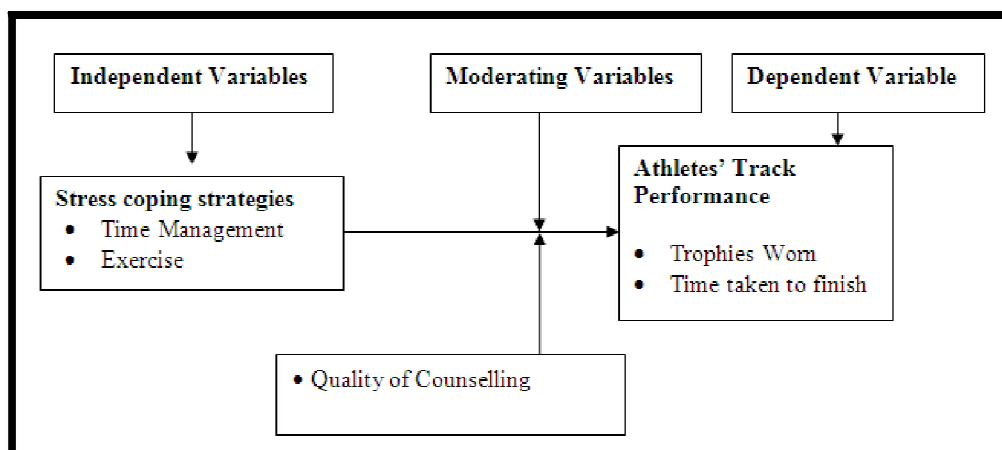


Figure 1: The Moderating Influence of Quality of Counselling on the Relationship between Instructional Related Stress and Student Athletes' Track Performance In Secondary Schools

Figure 1 indicates the relationship between independent, moderating and dependent variables. The independent variable was coping strategies by student athlete. Affecting this process is the moderating variable was quality of counselling. These factors can moderate the relationship between independent variables and dependent variable. The model as conceptualized in this study emphasizes on how the independent variables may influence the dependent variables. The study hypothesizes that quality counseling moderates the relationship between coping strategies by student athletes and their track performance.

### 4. Research Design

This study undertook an exploratory survey approach with ex-post facto design. *Ex post facto* research, by its very design, investigates the world as it naturally occurs and explores phenomena that have already occurred (Johnson & Christensen, 2008). The study targeted 3,584 form two and three students in schools with high performance in athletics.

Given the sample size of 351 as per Krejcie & Morgan (1970) sampling table, the following formula was used to calculate stratified sample;

$$ss = \frac{zp}{tp} Xs$$

Where ss – stratified sample, zp – zonal population, tp – target population and s – sample. The sample size distribution for the study is shown in Table 2. The study purposively picked 5 athlete coaches and 5 Teacher Counselors as key informants to give deeper insight into selected stress factors influencing track performance of Student Athletes. The researcher took half of the sample size to represent both the gender in order to analyze how the different gender responds to stress.

Zone	No. Schools	Total No. of Form 2 and 3 Students	Sample Size	Male Athletes	Female Athletes
A	4	430	42	21	21
B	6	620	61	30	30
C	3	664	65	33	32
D	4	820	80	40	40
E	7	1050	103	52	51
Total	24	3584	351	176	175

Table 1: Sample Size of Student Athletes in School in Nakuru County

The study used a structured questionnaire to collect primary data. Descriptive (frequencies and percentages) analysis and inferential statistics such as chi-square test and Pearson's correlation analyses were used to analyze data after appropriate data coding. Descriptive statistics were used to investigate or explore one variable at a time. To test the hypotheses, chi-square test and Pearson's correlation analyses were conducted for each hypothesis and the results interpreted leading to the rejection or acceptance of the null hypotheses stated earlier. All hypotheses were tested at  $\alpha=0.05$ .

## 5. Findings and Discussions

### 5.1. Descriptive Statistics

Stress Coping Strategies	1	2	3	4	5
I multi task in sports and academics	58(17.1%)	64(18.8%)	48(14.1%)	68(20%)	102(30%)
I jog in the morning to cope with stress.	56(16.5%)	80(23.5%)	40(11.8%)	88(25.9%)	76(22.4%)
I read motivational books written by sportsmen.	42(12.4%)	52(15.3%)	44(12.9%)	114(33.5%)	88(25.9%)
I sleep early and also wake up early.	62(18.2%)	44(12.9%)	30(8.8%)	104(30.6%)	100(29.4%)
I try to concentrate on my work to overcome stress	42(12.4%)	62(18.2%)	26(7.6%)	96(28.2%)	114(33.5%)
I attend church and listen to sermons carefully.	48(14.1%)	60(17.6%)	50(14.7%)	76(22.4%)	106
I have developed a schedule to guide me in my activities.	52(15.3%)	42(12.4%)	52(15.3%)	94(27.6%)	100(29.4%)
I drink enough water to hydrate my body	66(19.4%)	48(14.1%)	38(11.2%)	112(32.9%)	76(22.4%)

Table 2: Distribution of Responses on Stress Coping Strategies Adopted by Students' Athletes

From data presented on Table 3, it was also observed that 58(17.1%) of respondents completely disagreed with the statement 'I multi task in sports and academics' while 64(18.8%) disagreed; 48(14.1%) were undecided; 68(20%) agreed and 102(30%) completely agreed with the statement. Concerning the statement: 'I jog in the morning to cope with stress' it was observed that 56(16.5%) completely disagreed; 80(23.5%) disagreed; 40(11.8%) were undecided; 88(25.9%) agreed and 76(22.4%) completely agreed. Similarly, 42(12.4%) of respondents completely disagreed with the statement 'I read motivational books written by sportsmen' while 52(15.3%) disagreed; 44(12.9%) were undecided; 114(33.5%) agreed and 88(25.9%) completely agreed with the statement. It was also observed that 62(18.2%) of respondents completely disagreed with the statement 'I sleep early and also wake up early' while 44(12.9%) disagreed; 30(8.8%) were undecided; 104(30.6%) agreed and 100(29.4%) completely agreed with the statement. With regard to the statement: 'I try to concentrate on my work to overcome stress' it was observed that 42(12.4%) completely disagreed; 62(18.2%) disagreed; 26(7.6%) were undecided; 96(28.2%) agreed and 114(33.5%) completely agreed. Similarly, 48(14.1%) of respondents completely disagreed with the statement 'I attend church and listen to sermons carefully' while 60(17.6%) disagreed; 50(14.7%) were undecided; 76(22.4%) agreed and 106(10.6%) completely agreed with the statement. It was also observed that 52(15.3%) of respondents completely disagreed with the statement 'I have developed a schedule to guide me in my activities' while 42(12.4%) disagreed; 52(15.3%) were undecided; 94(27.6%) agreed and

100(29.4%) completely agreed with the statement. With regard to the statement: 'I drink enough water to hydrate my body' it was observed that 66(19.4%) completely disagreed; 48(14.1%) disagreed; 38(11.2%) were undecided; 112(32.9%) agreed and 76(22.4%) completely agreed.

The level of stress coping strategies was conceptualized as a composite variable derived from the averages of non-missing responses on 8 items. The overall averages were divided into 3 categories: Low; Moderate and High. The expected highest score per respondent was 50, and therefore, transition points were  $x \leq 13$  for Low;  $x \geq 14 \leq 26$  for Moderate and  $x \geq 27$  for high levels of completion related stress. The findings of the study are presented on Table 22

Stress Coping strategies	Frequency	Percentage
Low	4	1.2
Moderate	158	46.5
High	178	52.4
Total	340	100.0

Table 3: Distribution of Stress Coping Strategies

Data presented in Table 22 indicates that the modal group of respondents presented moderate institutional related stress levels (46.2%) compared to 1.2% of respondents who presented low levels and 52.4% who presented high levels.

Athletes Track Performance	Frequency	Percentage (%)
Low	20	5.9
Moderate	248	72.9
High	72	21.2
Total	340	100.0

Table 4: Distribution of Athletes Track Performance Levels

Data presented in Table 13 indicates that the modal group of respondents presented moderate athletes track performance levels (72.9%) compared to 5.9% of respondents who presented low levels and 21.2% who presented high levels.

## 5.2. Inferential Statistics

Table 4 Stress Coping Strategies Adopted by Students' Athletes and Performance on the Track  
The study sought to establish if stress coping strategies adopted by students' athletes presented any statistically significant influence on the students' performance on the track. The findings are presented on Table 31

Stress Coping Strategies Adopted by Students' Athletes	Athletes Track Performance			Total
	Low	Moderate	High	
Low	4(100%)	0(0%)	0(0%)	4(100%)
Moderate	4(2.5%)	116(73.4%)	38(24.1%)	158(100%)
High	12(6.7%)	132(74.2%)	34(19.1%)	178(100%)
Total	20(5.9%)	248(72.9%)	72(21.2%)	340(100%)

Table 5: Cross Tabulation of Stress Coping Strategies Adopted by Students' Athletes and Athletes Track Performance

Data presented on Table 31 indicates that 4(100%) of respondents who reported low stress coping strategies adopted by students' athletes related stress levels presented low track performance. On the other hand, 116(73.4%) of respondents who reported moderate stress coping strategies adopted by students' athletes related stress levels also presented moderate track performance. Finally, it was observed that 132(74.2%) of respondents who reported high stress coping strategies adopted by students' athletes related stress levels presented high track performance.

To test for the significance of the relationship between stress coping strategies adopted by students' athletes and track performance among athletes, the research postulated a null hypothesis  $H_0$ : At 0.05 significance level, there is no statistically significant relationship between stress coping strategies adopted by students' athletes and track performance among athletes. Chi square test indicated that stress coping strategies adopted by students' athletes was significantly related to track performance ( $\chi^2 = 68.258$ ;  $df = 4$ ,  $p = 0.000 < 0.05$ ).

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.171	.150		21.137	.000
	multi task in sports and academics	-.083	.024	-.194	-3.426	.001
	Jog in the morning	.018	.026	.041	.703	.482
	Read motivational books	-.008	.028	-.017	-.294	.769
	sleep early	.006	.025	.013	.224	.823
	Concentrate on my work	.008	.028	.019	.295	.768
	Attend church	.001	.028	.002	.035	.972
	Work on schedule	.011	.029	.024	.373	.709
	Drink enough water	-.070	.026	-.158	-2.650	.008

Table 6: Regression Results of Stress Coping Strategies Adopted by Students' Athletes and Performance on the Track

Table 32 regression results of stress coping strategies adopted by students' athletes and performance on the track. The study established significant influence of student athletes multi-tasking on academics and sports and their track performance  $r=-0.083$ ,  $p=0.001<0.05$ . Secondly, the study established significant relationship of student athletes drinking enough water on their track performance  $r=-0.070$ ,  $p=0.008<0.05$ . The hypothesis that  $H_{04}$ : There is no statistically significant influence of stress coping strategies on student athletes' track performance in secondary schools in Nakuru County, Kenya was rejected and alternate hypothesis accepted. Based on these statistical inferences, it was concluded that at 0.05 significance level, stress coping strategies adopted by students' athletes negatively influences their track performance among athletes. The result of present study matches the studies by Anshell (2000) and Julisima (2005) found out that in sport scenes, the athletes use problem-focused coping method more frequently. Although some researchers showed that avoidance coping method is more effective than other coping methods on improvement of performance of athletes (Carpenter, 1992; Hosseini Nia, 2008) the findings of majority of associated studies show that the athletes with higher self-confidence use avoidance method more often. Davenport et al, (2004) reported a significantly positive association between self-confidence and problem focused coping method. They also found out that avoidance coping method is often used in open skills methods while problem-focused coping method is common among closed skills sports (Devonport et al., 2003). In addition, the associated studies show that problem-focused coping method is used when the surrounding conditions for the athlete is controllable and predictable (e.g. open skills sports) (Yoo,2000). In sum, the review of association findings show that the type of sport and characteristics of athletes influence the reaction and psychological responses of athletes. Finally, because regular and long-term attendance in physical exercises changes personality traits such as anxiety and prepares the person for offering a calm and happy life, exercise could be one of the methods of stress reduction among the individuals. It could prepare an individual for optimal coping with stress (i.e. problem-focused). However, the coaches and athletes can recognize the coping methods more thoroughly and enhance the effectiveness of each method and their performance as well.

The finding is further supported by Dias, Cruz, and Fonseca (2012), researchers examined the relationship between competitive trait anxiety, cognitive threat appraisal, and coping styles. As part of the study, coping was divided into three categories: problem-focused, emotion-focused, and avoidance coping. Problem-focused coping refers to cognitive and behavioral efforts aimed at solving the stressful relationship between the individual and environment. Emotion-focused coping aims to regulate the response to a form of distress. The goal of emotion-focused coping is to regulate the emotional response to a problem or lessen the emotional distress. Typically, avoidance coping is considered a form of emotion-focused coping. Participants in the study consisted of 550 athletes over 13 individual and team sports. Athletes were given several questionnaires to assess levels of coping. The scales included the Sport Anxiety Scale, COPE, and the Cognitive Appraisal Scale in Sport Competition- Threat Perception. Results of the study indicated that threat appraisal and anxiety play an important role with coping. In general, athletes with higher levels of worry were more likely to completely disengage from the behavior. Also, athletes with higher concentrations of problems were more apt to vent their problems and engage in self-distraction. Overall, these methods of coping supported the link between cognitive anxiety and poor-performance.

	Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.531	.281		5.447	.000
	Coping strategies	-.018	.007	-.182	-2.794	.006
2	(Constant)	1.523	.284		5.367	.000
	Coping strategies	-.018	.007	-.176	-2.487	.013
	Moderating	-.011	.050	-.014	-.214	.831

Table 7: Moderating Stress Related Factors and Performance on the Track



Table 7 shows the findings before and after interaction of moderating stress factors was introduced as moderating variable. The study established a significant influence of coping strategies by student athletes and student athlete's track performance  $r = -0.018$ ,  $p=0.006<0.05$  before interaction of the moderating variables and significant influence  $r= -0.018$ ,  $p= 0.013<0.05$  after interaction of the moderating variables. The introduction of quality of counseling moderating variable did not contribute to any change in the relationship between institutional related stress and student athletes' track performance.

## 6. Conclusions and Recommendations

### 6.1. Conclusions

The study first examined influence of stress coping strategies adopted by students' athletes on student athletes' track performance in secondary schools in Nakuru County, Kenya. The study established that stress coping strategies adopted by students' athletes negatively influences track performance among athletes in secondary schools in akuru County, Kenya. The introduction of quality of counselling moderating variable did not contribute to any change in the relationship between stress coping strategies adopted by student athletes and student athletes' track performance.

### 6.2. Recommendations

Secondary schools in Kenya should put in place strategies for boosting positive competition related stress as a means to boosting track performance among student athletes. Secondly the professionals involved in management of sports and games as well as guidance and counselling departments in secondary schools in Kenya should come up with adequate programmes and ways of managing institutional related stress to mitigate against the negative influences it has on track performance among student athletes. Third, there should be proper arrangements for boosting positive personality related stress to strengthen the observed positive influence on track performance among athletes in secondary schools in Nakuru County, Kenya. Four, Guidance and Counselling Departments in secondary schools in Kenya should design appropriate programmes for proper stress coping strategies adopted by students' athletes to reduce the negative influence on track performance among athletes. Guidance and Counselling Departments should design appropriate programmes for school-based interventions used by students' athletes to increase the positive influence on track performance among athletes in secondary schools in Nakuru County, Kenya.

## 7. References

- i. Aries, E., McCarthy, D., Salovey, P., & Banaji, M. R. (2004). A comparison of athletes and non-athletes at highly selective colleges: Academic performance and personal development. *Research in Higher Education*, 45(6), 577-602.
- ii. Abedalhafiza, A.; Ziad, A. and Al-Haliq, M. (2010). Sources of stress and coping styles among student-athletes in Jordan universities, *Procedia Social and Behavioral Sciences*, 5, 1911-1917.
- iii. Baron-Thiene, A., & Alfermann, D. (2015). Personal characteristics as predictors for dual career dropout versus continuation. A prospective study of adolescent athletes from German elite sport schools. *Psychology of Sport and Exercise*, 21, 42-49.
- iv. Bamuhair, S. S., Al Farhan, A. I., Althubaiti, A., Agha, S., ur Rahman, S., & Ibrahim, N. O. (2015) Sources of stress and coping strategies among undergraduate medical students enrolled in a problem-based learning curriculum. *Journal of Biomedical Education*, 2015, 1(8).
- v. Busari, A. O. (2011). *Validation of student academic stress scale (SASS)*. European Journal of Social Sciences, 21(1), 94-105.
- vi. Delahaij, R., van Dam, K., Gaillard, A. W. K., & Soeters, J. (2011). Predicting performance under acute stress: The role of individual characteristics. *International Journal of Stress Management*, 18(1), 49-66.
- vii. Devonport, T. J., Lane, A. M., & Biscomb, K. (2013). Exploring coping strategies used by national adolescent netball players across domains. *Journal of Clinical Sport Psychology*, 7, 161-177.
- viii. Dias, C., Cruz, J., & Fonseca, A. (2012). The relationship between multidimensional competitive anxiety, cognitive threat appraisal, and coping strategies: A multisport study. *International Journal of Sport and Exercise Psychology*, 10(1), 52- 65
- ix. Edworthy, A. (2000). *Managing stress*. London: The Cromwell Press.
- x. Fletcher, D., Hanton, S., & Mellalieu, S. D. (2006). An organizational stress-review: Conceptual and theoretical issues in competitive sport. In S. Hanton & S. D. Mellalieu (Eds.), *Literature review in sport psychology* (pp. 321-374). Hauppauge, NY: Nova Science
- xi. Gilbert, J. N., Gilbert, W., & Morawski, C. (2007). Coaching strategies for helping adolescent athletes cope with stress: Reduce the stress about reducing stress in your athlete. *JOPERD – Journal of Physical Education, Recreation & Dance*, 78(2), 13-24. Retrieved November 3, 2008, from General OneFile database.
- xii. Gregg, M. & Hall. C., (2005). The imagery ability, imagery use and performance relationship. *The Sport Psychologist*, 19(3): 93-99.
- xiii. Gustafsson, H., Madigan, D. J., & Lundkvist, E. (2017). Burnout in athletes. In R. Fuchs & M. Gerber (Eds.), *Stress regulation und Sport* [Stress regulation and sports]. Heidelberg: Springer.
- xiv. Hamid B & Mohammad A. B. (2010). The impact of styles of coping with stress on sport achievement, *Procedia Social and Behavioral Sciences*, 5, 764-769.



- xv. Hamilton, R., Scott, D., & Macdougall, M., (2007). Assessing the effectiveness of Self-Talk interventions on endurance performance. *Journal of Applied Sport Psychology, 19*(3): 226-239.
- xvi. Hanton, S. & Connaughton, D. (2002). Perceived control of anxiety and its relationship with self-confidence performance: A qualitative explanation. *Research Quarterly for Exercise and Sport, 73*, 87-97.
- xvii. Hoar, S. D., Evans, M. B., & Link, C. A. (2012). How do master athletes cope with precompetitive stress at a "senior games"? *Journal of Sport Behavior, 35*(2), 181-203.
- xviii. Holmberg, P. M. & Sheridan, D. A. (2013). Self-determined motivation as a predictor of burnout among college athletes. *The Sport Psychologist, 27*. 177-187.
- xix. Howden, J., (2007). Mental skills training for coaches to help athletes focus their attention, manage arousal, and improve performance in sport. *Journal of Education, 1*, pp. 49-64.
- xx. Johnson, B., & Christensen, L. (2008). *Educational research: Quantitative, qualitative and mixed approaches* (3rd ed.). Thousand Oaks, CA: Sage.
- xxi. Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- xxii. Lazarus, R. S. (1983). *Puzzles in the study of daily hassle*. Paper presented at conference entitled integrative perspectives in youths Development; Person and Ecology. Berlin, West Germany.
- xxiii. Lombardo, E. R. Tan, G. Jensen, M. P. & Anderson, K. O. (2005). Anger management style and association with self-efficacy and pain in male veterans. *The Journal of Pain, 6*, 765-770. doi:10.1016/j.jpain.2005.07.003
- xxiv. Marino, F., Mbambo, Z., Kortekaas, E., Wilson, G., Lambert, M., Noakes, T., & Dennis, S. (2000). Advantages of smaller body mass during distance running in warm, humid environments. *Pflügers Archiv: European Journal of Physiology, 441*(2-3), 359-367.
- xxv. Markser, V. Z. (2011). Sport psychiatry and psychotherapy. Mental strains and disorders in professional sports. Challenge and answer to societal changes. *European Archives of Psychiatry and Clinical Neuroscience, 261*, 182-5.
- xxvi. Melgosa, Julian. (2000). *Less Stress*. Editorial Safeliz: Madrid.
- xxvii. Navaneethan, B. & Soundara, R., (2010). Effect of progressive muscle relaxation training on competitive anxiety of male inter-collegiate volleyball players. *Research Journal of Physical Education and Sports Science, pp. 45-57*
- xxviii. Nucci, C., & Young-Shin, K. (2005). Improving socialization through sport: an analytic review of literature on aggression and sportsmanship. *The Physical Educator, 62*(3), 123-129.
- xxix. Ongonga, J. O., Okwara, M. O. and Okello, T. M. (2010). Sports and Secondary Education in Kenya. *International Research Journals, 1* (11), 607-617.
- xxx. Özgünen, K. T., Kurdak, S. S., Maughan, R. J., Zeren, Ç., Korkmaz, S., Yazıcı, Z., Ersöz, G., Shirreffs, S. M., Binnet, M. S., & Dvorak, J. (2010). Effect of hot environmental conditions on physical activity patterns and temperature response of football players. *Scandinavian Journal of Medicine & Science In Sports, 20*, 140-147.
- xxxi. Peluso EA, Ross MJ, Gfeller JD, & Lavoie DJ. (2005). A comparison of mental strategies during athletic skills performance. *Journal of Sports Science & Medicine, 4*(4), 543-9.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3899670/pdf/jssm-04-543.pdf>
- xxxii. Richartz, A., & Sallen, J. (2017). *Combining elite sports and academic career. Chronic stressors, protective resources and preventative approaches. Multiple stressors in the contexts of health and society* (pp. 65-83). Berlin: LIT.
- xxxiii. Rumbold, J. L., Fletcher, D., & Daniels, K. (2012). A systematic review of stress management interventions with sport performers. *Sport, Exercise, and Performance Psychology, 1*(3), 173-193.
- xxxiv. Scott, M. J; Stradling, S. G and Dryde, W. (1995). *Developing Cognitive Behavioural Counselling*. Sage Publications. London.
- xxxv. Secades, X. G., Molinero, O., Salguero, A., Ruiz Barquin, R., de la Vega, R., & Márquez, S. (2016). Relationship between resilience and coping strategies in competitive sport. *Perceptual & Motor Skills, 122*(1), 336-349.
- xxxvi. Siegel, R., & Laursen, P. (2012). Keeping your cool: Possible mechanisms for enhanced exercise performance in the heat with internal cooling methods. *Sports Medicine (Auckland, N.Z.), 42*(2), 89-98. doi:10.2165/11596870-00000000-00000
- xxxvii. Van Zyle, Y., Surujlal, J. & Singh C. (2009). An empirical study of university student-athletes strategies for coping with stress. *African Journal for Physical Health Education, Recreation and Dance, September (Supplement), 62-68*.
- xxxviii. Ursin, H. (2005). Press stop to start: The role of inhibition for choice and health. *Psychoneuroendocrinology, 30*: 1059-1065.
- xxxix. Ursin, H., & Eriksen, H. R. (2004). The Cognitive Activation Theory of Stress. *Psychoneuroendocrinology, 29*, 567-592.
- xl. Wilson, G. S., Pritchard, M. E., & Schaffer, J. (2004). Athletic status and drinking behavior in college students: the influence of gender and coping styles. *Journal of American College Health, 52*, 269-273.